

135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7010 1670 0002 5138 8175

October 10, 2011

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2011-1074

NRC Incident No.: 991780

Will Co. EMA Report No.: 111006-908-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on October 6, 2011 to Illinois Emergency Management Agency (IEMA – Report No. 2011-1074, National Response Center (NRC – Report No. 991780) and Will County Emergency Management Agency (Will Co. EMA Report No. 111006-908-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On October 6, 2011 intermittent flaring began at the south plant flare (844C-2) due to a loss of the flare gas compressor. Flare gas compressor was restarted and flaring ceased.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Emission calculations indicate the emissions were below the reportable quantity for sulfur dioxide.

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 October 10, 2011

If there are questions or additional information needed at this time, please contact Brigitte Postel at (630) 257-4221 or me at (630) 257-4450.

Sincerely,

C. W. Harmon, Manager

Health, Safety, Security, and Environmental

BMP/PLM

cc: Will County EMA

IEPA – Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL RETURN RECEIPT REQUESTED 7010 1670 0002 5138 8243

October 19, 2011

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

Supplemental Follow-up Information

IEMA Incident No.: H2011-0975

NRC Incident No.: 989411

Will Co. EMA Incident No.: 110913-90101

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms Allen:

This is follow up to the telephone notification made on September 13, 2011 and follow-up letter (**OE 121-11**) dated September 16, 2011 to Illinois Emergency Management Agency (IEMA – Report No. H2011-0975, National Response Center (NRC – Report No. 989411) and Will County Emergency Management Agency (Will Co. EMA – Report No. 110913-90101) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On September 13, 2011, flaring began at 4:50 a.m., when the South Plant flare gas recovery compressor (844GB-401) was shut down due to a pin hole piping leak in the flare knockout system. Piping was replaced with spool pieces, hydro-tested and the flare gas compressor restarted. Flaring associated with the leak ended on September 14, 2011 at approximately 10:28 pm.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent calculations showed the emission of sulfur dioxide (SO₂, CAS Registry No. 7446-09-05) were estimated to be 36,200 lbs.

Ms. Kathy Allen Page 2 October 19, 2011

There are no known off-site impacts as a result of this incident. There are no anticipated acute or chronic health risks associated with the release.

If there are questions on this information, please contact Brigitte Postel at (630) 257-4221 or me at (630) 257-4450.

Sincerely,

C. W. Harmon

Manager, Health, Safety, Security, and Environmental

BMP/PLM

cc: Will County EMA

IEPA Regional Office, Des Plaines

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit

Jim Entzminger, USEPA, Chicago

NATIONAL RESPONSE CENTER 1-800-424-8802

*** For Public Use ***

Information released to a third party shall comply with any applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 989411

INCIDENT DESCRIPTION

*Report taken at 05:58 on 13-SEP-11

Incident Type: FIXED

Incident Cause: EQUIPMENT FAILURE

Affected Area:

The incident occurred on 13-SEP-11 at 04:56 local time.

Affected Medium: AIR ATMOSPHERE

SUSPECTED RESPONSIBLE PARTY

Organization:

CITGO REFINERY

LEMONT, IL 60439

Type of Organization: PRIVATE ENTERPRISE

INCIDENT LOCATION

135TH ST & NEW AVE County: COOK

City: LEMONT State: IL Zip: 60439

RELEASED MATERIAL(S)

CHRIS Code: SFD

Official Material Name: SULFUR DIOXIDE

Also Known As:

Qty Released: 0 UNKNOWN AMOUNT

DESCRIPTION OF INCIDENT

CALLER REPORTED THAT A PIPE LEAK CAUSED A COMPRESSOR SHUTDOWN. THE COMPRESSOR RECOVERS SULFUR DIOXIDE. SULFUR DIOXIDE IS ESCAPING INTO THE ATMOSPHERE AS A RESULT

OF THE SHUTDOWN.

INCIDENT DETAILS

Package: NO Building ID:

Type of Fixed Object: REFINERY Power Generating Facility: NO

Generating Capacity:

Type of Fuel:

NPDES:

NPDES Compliance: UNKNOWN

DAMAGES

Fire Involved: NO Fire Extinguished: UNKNOWN

INJURIES: NO

Hospitalized:

Who Evacuated:

Empl/Crew:

Passenger:

FATALITIES:

Damages:

Empl/Crew:

Passenger:

Occupant:

EVACUATIONS: NO

NO

.

Length of Di

Direction of

Closure Type Air: Description of Closure

Closure

Radius/Area:

Closure

.__.

Road:

N

Major Artery: N

Waterway: N

Track.

Passengers Transferred: NO Environmental Impact: UNKNOWN

Media Interest: NONE Community Impact due to Material:

REMEDIAL ACTIONS

CREW IS TRYING TO REPAIR THE PIPE TO TURN BACK ON THE COMPRESSOR.

Release Secured: UNKNOWN

Release Rate:

Estimated Release Duration:

WEATHER

Weather: CLEAR, 65°F

ADDITIONAL AGENCIES NOTIFIED

Federal:

NONE

State/Local: NONE

State/Local On Scene:

NONE

State Agency Number:

NONE

NOTIFICATIONS BY NRC

ATLANTIC STRIKE TEAM (MAIN OFFICE)

13-SEP-11 06:07

CG INVESTIGATIVE SVC CHICAGO (CGIS RAO CHICAGO)

13-SEP-11 06:07

CHICAGO POLICE DEPARTMENT (CHICAGO PD FUSION CENTER)

13-SEP-11 06:07

CITY OF CHICAGO (COMMAND CENTER)

13-SEP-11 06:07

DOT CRISIS MANAGEMENT CENTER (MAIN OFFICE)

13-SEP-11 06:07

EPA CRIMINAL INVESTIGATION DIVISION (CID REGION V)

13-SEP-11 06:07

U.S. EPA V (MAIN OFFICE)

13-SEP-11 06:09

IA U.S. ATTORNEY'S OFFICE (INTELLIGENCE OFFICER)

13-SEP-11 06:07

IL U.S. ATTORNEY'S OFFICE CENTRAL (MAIN OFFICE)

13-SEP-11 06:07

IL DNR (MAIN OFFICE)

13-SEP-11 06:07

IL STATE EMERG AGCY (MAIN OFFICE)

13-SEP-11 06:07

IN STATE DEPT OF HOMELAND SECURITY (SITUATIONAL AWARENESS)

13-SEP-11 06:07

NATIONAL INFRASTRUCTURE COORD CTR (MAIN OFFICE) 13-SEP-11 06:07

13-SEP-11 06:07

NOAA RPTS FOR IL (MAIN OFFICE)

13-SEP-11 06:07

IL EPA ERT (MAIN OFFICE)

13-SEP-11 06:07

IN DEPT ENV MNGMT (MAIN OFFICE)

13-SEP-11 06:07

USCG DISTRICT 9 (COMMAND CENTER)

13-SEP-11 06:07

ADDITIONAL INFORMATION

CALLER HAD NO ADDITIONAL INFORMATION.

*** END INCIDENT REPORT # 989411 **

The National Response Center is strictly an initial report taking agency and does not participate in the investigation or incident response. The NRC receives initial reporting information only and notifies Federal and State On-Scene Coordinators for response. The NRC does not verify nor does it take follow-on incident information. Verification of data and incident

000411 10/04/0011

response is the sole responsibility of Federal/State On-Scene Coordinators. Data contained within the FOIA Web Database is initial information only. All reports provided via this server are for informational purposes only. Data to be used in legal proceedings must be obtained via written correspondence from the NRC.





135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7010 1670 0002 5138 8168

October 11, 2011

Illinois Environmental Protection Agency Office of Emergency Response Emergency Operations Unit P.O. Box 19276, Mail Drop # 29 Springfield, IL 62704

Follow-up Information

IEMA Incident No.: H2011-0882

NRC Incident No.: 985696

Will Co. EMA Incident No.: 1108 12-903-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

To whom it may concern:

This is in response to the IEPA Incident Inquiry letter dated September 27, 2011, (received September 29, 2011) regarding the above-referenced potential excess emissions event that occurred at CITGO Petroleum Corporation Lemont Refinery in Lemont, Will County, Illinois.

This event was flaring associated with the shutdown of the south plant flare gas recovery compressor due to required follow-up repair of a minor internal lube oil leak after a planned maintenance event. Calculations showed the emissions of sulfur dioxide were estimated to be 3,800 lbs.

As stated in the IEPA letter dated September 27, 2011, provided below is the requested information for this incident:

- A description of what happened and how it happened reference Attachment 2
- Any mitigation actions taken at the time of the incident reference Attachment 2
- A description of any additional cleanup and preventative actions planned the SO₂ emission was a result of combustion from the tip of an elevated flare (approx 200 ft). No cleanup was warranted. The compressor was shutdown due to required follow-up repair of a minor internal lube oil leak after a planned maintenance event reference
 Attachment 2
- No clean-up or disposal was warranted

IEPA, Office of Emergency Response Page 2 October 11, 2011

A follow-up letter was sent to Illinois Emergency Management Agency (IEMA) on September 13, 2011 indicating that the emissions exceeded the SO₂ reportable quantity. A copy of that letter is included in **Attachment 1**.

Also, for purposes of satisfying the reporting requirements of Condition 7.7.10(b)(ii) of the refinery's Clean Air Act Permit Program (CAAPP) permit, **Attachment 2** contains the root-cause analysis (RCA) that was completed for this event, as required by the Consent Decree between U.S. EPA, Illinois EPA, and CITGO Petroleum Corporation entered on January 26, 2005. This RCFA contains the reporting elements required by the above-referenced CAAPP Permit Condition.

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions on this information, please contact Brigitte Postel at (630) 257-4221 or me at (630) 257-4450.

Sincerely,

C. W. Harmon, Manager

Health, Safety, Security, and Environmental

BMP/PLM Attachments

CC:

Will County EMA

Don Klopke, IEPA, Emergency Operations Unit (Springfield)
IEPA – Des Plaines Office (Emergency Operations Unit)

IEPA - Compliance & Systems Management, Springfield Office

Jim Entzminger, USEPA, Chicago Office

John Waligore, IEPA, Division of Legal Counsel



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7011 1570 0003 0111 3566

January 19, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-0031 NRC Incident No.: 1000328

Will Co. EMA Report No.: 120113-90101

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on January 13, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-0031, National Response Center (NRC – Report No. 1000328) and Will County Emergency Management Agency (Will Co. EMA Report No. 120113-90101) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On January 13, 2012, flaring began at approximately 4:18 p.m. when the South Plant flare gas compressor tripped off-line due to a plugged instrument air line. Efforts continued through the night to restart the compressor. Flaring ended at 8:41 a.m. January 14, 2012 when the compressor was re-started. The incident investigation is on-going.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent calculations showed the emissions of sulfur dioxide (SO_2 , CAS Registry No. 7446-09-05) were estimated to be 8,870 lbs.

Ms. Kathy Allen Page 2 January 19, 2012

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or additional information required, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4450.

Sincerely,

C. W. Harmon, Manager

Health, Safety, Security, and Environmental

MWK/PLM

cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7011 1570 0003 0111 3610

January 27, 2012

Ms. Kathy Allen
Illinois Emergency Management Agency (IEMA)
State Emergency Response Commission
1035 Outer Park Drive
Springfield, IL 62704

IEMA Incident No.: H2012-0041 NRC Incident No.: 1000800

Will Co. EMA Report No.: 120120-91001

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on January 20, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-0041, National Response Center (NRC – Report No. 1000800) and Will County Emergency Management Agency (Will Co. EMA Report No. 120120-91001) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On January 20, 2012, flaring began at approximately 12:23 a.m. when Unit 590 went down. Efforts continued through the night to restart the compressor. Flaring ended at 1:40 a.m. January 20, 2012 when flow to the compressor was re-stored.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent calculations showed the emissions of sulfur dioxide (SO₂, CAS Registry No. 7446-09-05) were less than the "Reportable Quantity" threshold of 500 lbs.

Ms. Kathy Allen Page 2 January 27, 2012

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or additional information required, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4450.

Sincerely,

C. W. Harmon, Manager

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Health, Safety, Security, and Environmental

MWK/PLM

cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7011 1570 0003 0111 4167

April 19, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-0336

NRC Incident No.: 1008783

Will Co. EMA Report No.: 120416-909-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on April 16, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-0336), National Response Center (NRC – Report No. 1008783) and Will County Emergency Management Agency (Will Co. EMA Report No. 120416-909-01) regarding an incident involving a collapsed crane boom. The boom came to rest on a pipe row damaging insulation, some of which contained asbestos.

On April 16, 2012, at approximately 7:45 a.m., the boom from a crane which is owned and operated by a third-party contractor, fell into the open area between the refinery's Crude Unit (U111) and UnSat Gas Plant Unit (U217) striking the pipe row directly east of U111. The amount of insulation that potentially contained asbestos was unknown at the time of the incident, so a precautionary notification was made.

A complete assessment of the pipe row is being performed, information is still being accumulated and the investigation is on-going.

Ms. Kathy Allen Page 2 April 19, 2012

There were no injuries or known off-site impacts as a result of this incident.

If there are questions or additional information required, please contact me at (630) 257-4450.

Sincerely,

C. W. Harmon, Manager

Cal Ham

Health, Safety, Security, and Environmental

/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7011 1570 0003 0111 4174

April 20, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-0354

NRC Incident No.: 1009062

Will Co. EMA Report No.: 120418-908-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on April 18, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-0354, National Response Center (NRC – Report No. 1009062) and Will County Emergency Management Agency (Will Co. EMA Report No. 120418-908-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On April 18, 2012 flaring began at approximately 9:46 p.m. when a relief valve in the Sales Gas unit lifted, causing intermittent flaring. The operational issue was resolved ending the flaring at 10:56 p.m. the same day.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent calculations showed the emissions of sulfur dioxide (SO₂, CAS Registry No. 7446-09-05) were less than the "Reportable Quantity" threshold of 500 lbs.

There were no known off-site impacts as a result of this incident. There were no known acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 April 20, 2012

If there are questions or additional information required, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4450.

Sincerely,

C. W. Harmon, Manager

CWAlam

Health, Safety, Security, and Environmental

MWK/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7011 1570 0003 0112 1097

May 3, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-0937

NRC Incident No.: 1009989

Will Co. EMA Report No.: 120429-904-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on April 29, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-0937, National Response Center (NRC – Report No. 1009989) and Will County Emergency Management Agency (Will Co. EMA Report No. 120429-904-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On April 29, 2012, intermittent flaring occurred when a portion of the refinery's units were shut-down associated with the planned Turnaround for extended maintenance and repair of various units. The Turnaround is scheduled to be completed by early June.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown and a precautionary notification was made. The estimated calculated amount released during this time period will be provided.

There were no known off-site impacts as a result of this intermittent flaring. There were no known acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 May 3, 2012

If there are questions or additional information required, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4450.

Sincerely,

C. W. Xamor

C. W. Harmon, Manager Health, Safety, Security, and Environmental

/PLM

Cc: Will County Emergency Management Agency
IEPA – Des Plaines Office
Ray Pilapil, IEPA – Compliance & Systems Management, Springfield
Don Klopke, IEPA - Emergency Operations Unit
Jim Entzminger, USEPA, Chicago Office



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7011 1570 0003 0112 1127

May 14, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-0430 NRC Incident No.: 1010724

Will Co. EMA Report No.: 1205079-903-001

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on May 7, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-0430, National Response Center (NRC – Report No. 1010724) and Will County Emergency Management Agency (Will Co. EMA Report No. 1205079-903-001) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On May 7, a precautionary call was made to the agencies to report intermittent flaring at Fluid Catalytic Cracking Unit (Unit 112) when the Wet Gas Compressor went down due to motor failure that occurred during a storm with lightning.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown and a precautionary notification was made. Emission calculations are on-going and will be provided in follow-up correspondence.

Ms. Kathy Allen Page 2 May 14, 2011

There were no known off-site impacts as a result of this incident. There were no known acute or chronic health risks associated with the release.

If there are questions or additional information required, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4450.

Sincerely,

C. W. Harmon, Manager

Health, Safety, Security, and Environmental

/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit

Jim Entzminger, USEPA, Chicago Office

Bcc: J. Cristman D. Fruge J. Press Y. Jeanneret



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7011 1570 0003 0112 1134

May 15, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-0438

Will Co. EMA Report No.: 120508-904-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on May 8, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-0430 and Will County Emergency Management Agency (Will Co. EMA Report No. 120508-904-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On May 8, at approximately 9:15am, Unit 119 Sulfur Recovery "B-train" tripped off-line which resulted in and excess emissions for approximately 15 minutes from the B-train stack.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown and a precautionary notification was made. Subsequent calculations showed the emissions of sulfur dioxide (SO₂, CAS Registry No. 7446-09-05) were less than the "Reportable Quantity" threshold of 500 lbs.

Ms. Kathy Allen Page 2 May 15, 2011

There were no known off-site impacts as a result of this incident. There were no known acute or chronic health risks associated with the release.

If there are questions or additional information required, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4450.

Sincerely,

C. W. Harmon, Manager

CUHam

Health, Safety, Security, and Environmental

/PLM.

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7011 1570 0003 0112 1141

May 16, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-0459 NRC Incident No.: 1011151

Will Co. EMA Report No.: 120510-908-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on May 10, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-0459, National Response Center (NRC – Report No. 1011151) and Will County Emergency Management Agency (Will Co. EMA Report No. 120510-908-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On May 10, 2012, at approximately 7:30 p.m., intermittent flaring occurred when the Fluid Catalytic Cracking Unit (FCCU) experienced an unplanned shutdown.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Due to an orderly shutdown no RQs were exceeded.

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 May 16, 2012

If there are questions or additional information required, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4450.

Sincerely,

C. W. Harmon, Manager

Callen

Health, Safety, Security, and Environmental

/PLM

cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7011 1570 0003 0112 1165

May 24, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-0493

NRC Incident No.: 1011830

Will Co. EMA Report No.: 120517-909-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on May 17, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-0493), National Response Center (NRC – Report No. 1011830) and Will County Emergency Management Agency (Will Co. EMA Report No. 120517-909-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On May 17, 2012, at approximately 12:00 a.m., intermittent flaring occurred associated with the re-start of the Fluid Catalytic Cracking Unit (FCCU). The intermittent flaring ended at approximately 2:20 p.m.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. This event is still being evaluated; the estimated calculated amount released during this time period will be provided.

There were no known off-site impacts as a result of this incident. There were no known acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 May 24, 2012

If there are questions or additional information required, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4450.

Sincerely,

C. W. Harmon, Manager

CWHam

Health, Safety, Security, and Environmental

MWK/PLM

cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
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7011 1570 0003 0112 1271

June 20, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-0618

NRC Incident No.: 1015010

Will Co. EMA Report No.: 120619-904-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on June 19, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-0618, National Response Center (NRC – Report No. 1015010) and Will County Emergency Management Agency (Will Co. EMA Report No. 120619-904-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On June 19, a precautionary call was made to the agencies to report flaring at Coker 1 (Unit 113), due to loss of air to a control valve for the unit's 13GB-1 compressor.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown and a precautionary notification was made. Emission calculations are on-going and will be provided in follow-up correspondence.

Ms. Kathy Allen Page 2 June 20, 2012

There were no known off-site impacts as a result of this incident. There were no known acute or chronic health risks associated with the release.

If there are questions or additional information required, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4450.

Sincerely,

C. W. Harmon, Manager

CWHenn

Health, Safety, Security, and Environmental

/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit



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7011 1570 0003 0112 1370

July 13, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-0687 NRC Incident No.: 1017046

Will Co. EMA Report No.: 120708-901-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on July 8, 2012 to Illinois Emergency Management Agency (IEMA – Report No. H2012-0687), National Response Center (NRC – Report No. 1017046) and Will County Emergency Management Agency (Will Co. EMA Report No. 120708-901-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On July 8, 2012 at 4:01 a.m., flaring occurred at C-2 and C-3 flares when the sales gas compressors were shut down due to a loose bolt. The flaring ended at 4:41 a.m.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent emissions estimates indicate that the total amount of SO_2 emitted was 74 lb (*i.e.*, less than 500 lb).

There were no known off-site impacts as a result of this incident. There were no known acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 July 10, 2012

If there are questions or additional information required, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4450.

Sincerely,

CUHam

C. W. Harmon, Manager Health, Safety, Security, and Environmental

MWK/PLM

cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
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7011 1570 0003 0112 1448

August 2, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-0782

NRC Incident No.: 1019213

Will Co. EMA Report No.: 120728-904-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on July 28, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-0782, National Response Center (NRC – Report No. 1019213) and Will County Emergency Management Agency (Will Co. EMA Report No. 120728-904-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On July 28, 2012, at approximately 1:00 am., intermittent flaring occurred when the Fluid Catalytic Cracking Unit (FCCU) experienced an unplanned shutdown.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent emission calculations indicate that the total amount of SO_2 emitted was less than 500 lb.

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 August 2, 2012

If there are questions or additional information required, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4450.

Sincerely,

C. W. Harmon, Manager

CWHam

Health, Safety, Security, and Environmental

/PLM

cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
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7011 1570 0003 0112 1462

August 13, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-0812

NRC Incident No.: 1020274

Will Co. EMA Report No.: 120807-909-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on August 7, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-0812, National Response Center (NRC – Report No. 1020274) and Will County Emergency Management Agency (Will Co. EMA Report No. 120807-909-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On August 7, 2012, at approximately 2:00 p.m., intermittent flaring occurred when the Fluid Catalytic Cracking Unit (FCCU) was started up.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent emission calculations indicate that the total amount of SO_2 emitted was approximately 1,760 lb.

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 August 13, 2012

If there are questions or additional information required, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret, Manager

Environmental

MWK/PLM

cc: Will County Emergency Management Agency

carneret

IEPA '- Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7011 1570 0003 0112 1479

August 13, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-0829

NRC Incident No.: 1020595

Will Co. EMA Report No.: 120810-904-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on August 10, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-0829, National Response Center (NRC – Report No. 1020595) and Will County Emergency Management Agency (Will Co. EMA Report No. 120810-904-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On August 10, 2012, at approximately 7:45 a.m., intermittent flaring occurred when the Coker Compressor (113GB-1) shutdown due to a false high level indication. The flaring ended at approximately 8:30 a.m.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent emission calculations indicate that the total amount of SO_2 emitted was 4,690 lb.

Ms. Kathy Allen Page 2 August 13, 2012

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or additional information required, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret, Manager

Environmental

MWK/PLM

cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
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7011 3500 0001 7457 2151

September 27, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-0993

NRC Incident No.: 1024982

Will Co. EMA Report No.: 120920-902

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on September 20, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-0993, National Response Center (NRC – Report No. 1024982) and Will County Emergency Management Agency (Will Co. EMA Report No. 120920-902) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On September 20, 2012, at approximately 7:45 a.m., intermittent flaring occurred when the Refinery's South Plant Flare Gas Compressor shutdown due to a false low lube oil pressure indication.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent emission calculations indicate that the total amount of SO_2 emitted was 2,700 lb.

Ms. Kathy Allen Page 2 September 27, 2012

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or if additional information required, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret

Manager, Environmental

/PLM

cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
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7011 3500 0001 7457 2199

October 8, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-1029

NRC Incident No.: 1026058

Will Co. EMA Report No.: 121001-901-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on October 1, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-1029, National Response Center (NRC – Report No. 1026068) and Will County Emergency Management Agency (Will Co. EMA Report No. 121001-901-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On October 1, 2012, at approximately 5:53 a.m., intermittent flaring occurred when the Refinery's Crude Unit experienced an unplanned shutdown due to a unit upset.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent emission calculations confirmed that the total amount of SO_2 emitted was more than 500 lb.

Ms. Kathy Allen Page 2 October 8, 2012

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or if additional information required, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4085.

Sincerely,

for Yvonne M. Jeanneret

Manager, Environmental

/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Don Klopke, IEPA - Emergency Operations Unit



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
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7011 3500 0001 7457 2267

October 25, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-1049

NRC Incident No.: 1027963

Will Co. EMA Report No.: 121021-904-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on October 21, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-1049, National Response Center (NRC – Report No. 1027963) and Will County Emergency Management Agency (Will Co. EMA Report No. 121021-904-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On October 21, 2012, at approximately 9:35 p.m., intermittent flaring occurred when the Refinery's South Plant Flare Gas Compressor tripped off-line due to a malfunctioning resistor in a circuit associated with the compressor's motor.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent emission calculations confirmed that the total amount of SO_2 emitted was more than 500 lb.

Ms. Kathy Allen Page 2 October 25, 2012

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or if additional information is required, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Manager, Environmental

/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7011 3500 0001 7457 2410

November 30, 2012

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2012-1229

NRC Incident No.: 1031396

Will Co. EMA Report No.: 121125-903-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on November 23, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-1229), National Response Center (NRC – Report No. 1031396) and Will County Emergency Management Agency (Will Co. EMA Report No. 121125-903-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On November 23, 2012, at 12:24 p.m., the refinery's Fluid Catalytic Cracking Unit (FCCU) experienced an unplanned shutdown due to a mechanical malfunction. At approximately 4:30 p.m. that afternoon, the unit was restarted; the re-start resulted in a brief intermittent flaring event.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so precautionary agency notifications were made. Subsequent calculations showed the emissions of sulfur dioxide (SO₂, CAS Registry no. 7446-09-05) were 10 lb, which is significantly less than the Reportable Quantity threshold of 500 lb.

Ms. Kathy Allen Page 2 November 30, 2012

There were no known off-site impacts as a result of this incident. There were no known acute or chronic health risks associated with the release.

If there are questions or if additional information is required, please contact Matt Cordina at (630) 257-4194 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7011 3500 0001 7457 2472

December 5, 2012

Ms. Kathy Allen
Illinois Emergency Management Agency (IEMA)
State Emergency Response Commission
1035 Outer Park Drive
Springfield, IL 62704

IEMA Incident No.: H2012-1247

NRC Incident No.: 1032067

Will Co. EMA Report No.: 121203-901-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on December 2, 2012 to Illinois Emergency Management Agency (IEMA – Report No. 2012-1247), National Response Center (NRC – Report No. 1032067) and Will County Emergency Management Agency (Will Co. EMA Report No. 121203-901-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On December 2, 2012, at approximately 4:20 a.m., the refinery's Sulfur Plant experienced an upset after a main breaker tripped at the Unit 21 substation resulting in three of the four trains shutting down. The emissions were from flaring, sulfur recovery plant and fuel gas combustion.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so precautionary agency notifications were made. Emission calculations are on-going and will be provided in follow-up correspondence.

Ms. Kathy Allen Page 2 December 5, 2012

There were no known off-site impacts as a result of this incident. There were no known acute or chronic health risks associated with the release.

If there are questions, or if additional information is required, please contact Matt Cordina at (630) 257-4194 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM

Cc:

Will County Emergency Management Agency

IEPA – Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines

Jim Entzminger, USEPA, Chicago Office

Jeanneret



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
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7011 3500 0001 7457 0072

January 14, 2013

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2013-0033 NRC Incident No.: 1035397

Will Co. EMA Report No.: 130111-903-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on January 11, 2013 to Illinois Emergency Management Agency (IEMA – Report No. H2013-0033), National Response Center (NRC – Report No. 1035397) and Will County Emergency Management Agency (Will Co. EMA Report No. 130111-903-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On January 11, 2013, intermittent flaring began at the south plant flare (844C-3) when a transformer for an instrument power panel lost power. The cause of the power loss is under investigation.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Emission calculations are on-going and will be provided in follow-up correspondence.

Ms. Kathy Allen Page 2 January 14, 2013

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions, or if additional information is required, please contact Matt Cordina (630) 257-4194 or me at (630) 257-4085.

Sincerely,

Yvohne M. Jeanneret Environmental Manager

/PLM

cc: Will County EMA

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7011 3500 0001 7457 0195

February 19, 2013

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2013-0137

NRC Incident No.: 1038447

Will Co. EMA Report No.: 130213-903-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on February 13, 2013 to Illinois Emergency Management Agency (IEMA – Report No. H2013-0137), National Response Center (NRC – Report No. 1038447) and Will County Emergency Management Agency (Will Co. EMA Report No. 130213-903-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On February 13, at approximately 9:20 p.m., intermittent flaring occurred when the Refinery's Crude Unit experienced an operational upset due to water carryover from the Crude Unit's first stage desalter. The upset and subsequent response resulted in downstream unit impact and ultimately led to brief shutdowns of the refinery sulfur trains.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent emission calculations confirmed that the total amount of SO_2 emitted was more than 500 lb.

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135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7011 3500 0001 7457 0317

March 21, 2013

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2013-0256

NRC Incident No.: 1041209

Will Co. EMA Report No.: 130316-908-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on March 16, 2013 to Illinois Emergency Management Agency (IEMA – Report No. H2013-0256), National Response Center (NRC – Report No. 1041209) and Will County Emergency Management Agency (Will Co. EMA Report No. 130316-908-01) regarding a tank overflow at the refinery's Aromatic Extraction Unit (U122).

On March 16, at approximately 12:35 a.m., a feedstock tank at Unit 122 was overfilled resulting in an overflow. This material falls under the "CERCLA Petroleum Exclusion Section 101(14)". The spill was contained in the tank dike and a thorough clean-up conducted. There was no RQ exceedance associated with the incident. Precautionary notifications were made to the agencies.

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 March 21, 2013

If there are questions, or if additional information is required, please contact Kevin Moss (630) 257-4452 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM

cc: Will County EMA

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL RETURN RECEIPT REQUESTED 7012 0470 0000 1931 3442

April 25, 2013

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2013-0402

NRC Incident No.: 1044344

Will Co. EMA Report No.: 130418-909-02

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on April 18, 2013 to Illinois Emergency Management Agency (IEMA – Report No. 2013-0402, National Response Center (NRC – Report No. 1044344) and Will County Emergency Management Agency (Will Co. EMA Report No. 130418-909-02) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On April 18, 2013, at approximately 9:44 a.m., intermittent flaring occurred when the Refinery's South Plant Flare Gas Compressor (844C) tripped offline. The cause of the trip is under investigation.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent calculations showed the emissions of sulfur dioxide (SO₂, CAS Registry No. 7446-09-05) were less than the "Reportable Quantity" threshold of 500 lb.

Ms. Kathy Allen Page 2 April 25, 2013

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or if additional information is required, please contact Matt Cordina at (630) 257-4194 or me at (630) 257-4085.

Sincerely,

Yvonne M Geanneret Environmental Manager

/PLM

Cc: Will County Emergency Management Agency

IEPA – Des Plaines Office

Hanner

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines



Lemont, IL 60439-3659

CERTIFIED MAIL RETURN RECEIPT REQUESTED 7012 0470 0000 1931 3466

April 25, 2013

Ms. Kathy Allen
Illinois Emergency Management Agency (IEMA)
State Emergency Response Commission
1035 Outer Park Drive
Springfield, IL 62704

IEMA Incident No.: H2013-0422

NRC Incident No.: 1044644

Will Co. EMA Report No.: 132104-909-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on April 21, 2013 to Illinois Emergency Management Agency (IEMA – Report No. 2013-0422, National Response Center (NRC – Report No. 1044644) and Will County Emergency Management Agency (Will Co. EMA Report No. 132104-909-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On April 21, 2013, at approximately 4:10 p.m., intermittent flaring occurred when the Refinery's South Plant Flare Gas Compressor (844C) shutdown. The cause of the shutdown is under investigation.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent calculations showed the emissions of sulfur dioxide (SO₂, CAS Registry No. 7446-09-05) were less than the "Reportable Quantity" threshold of 500 lb.

Ms. Kathy Allen Page 2 April 25, 2013

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or if additional information is required, please contact Matt Cordina at (630) 257-4194 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7012 0470 0000 1931 3558

May 21, 2013

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

Follow-up Information

IEMA Incident No.: H2013-0589 NRC Incident No.: 1047602

Will Co. EMA Incident No.: 130518-904-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on May 18, 2013 to Illinois Emergency Management Agency (IEMA – Report No. H2013-0589, National Response Center (NRC – Report No. 1047602) and Will County Emergency Management Agency (Will Co. EMA – Report No. 130518-904-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On May 18, 2013 at approximately 11:05 p.m., intermittent flaring occurred when the refinery's South Plant Flare Gas Compressor (844GB-401) was shut down to perform planned maintenance and inspection of the compressor. This shutdown was a planned maintenance activity, pursuant to Condition 7.7.5.b. of the refinery's Clean Air Act Permit Program (CAAPP) permit no. 96030079 (otherwise known as "Title 5" permit).

Preliminary calculations indicate that the reportable quantity for SO₂ was exceeded.

After the calculations surrounding this event are finalized, the additional notification required by Condition 7.7.10(b)(ii) of the CAAPP Permit will be submitted to IEPA.

Ms. Kathy Allen Page 2 May 21, 2013

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions on this information, please contact Matt Cordina at (630) 257-4194 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanheret Environmental Manager

/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
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7012 0470 0000 1931 3565

May 21, 2013

Mr. Yeric Yarrington
Engineering & Assessment Manager
Illinois Environmental Protection Agency (IEPA)
Office of Emergency Response
Emergency Operations Unit
1021 North Grand Avenue East
P.O. Box 19276, Mail Drop #29
Springfield, IL 62794-9276

Follow-up Information IEMA Incident No.: H2013-0256

NRC Incident No.: 1041209

Will Co. EMA Incident No.: 130316-908-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Response to IEPA Incident Inquiry Letter dated April 24, 2013

Dear Mr. Yarrington:

This is in response to the Illinois Environmental Protection Agency (IEPA) Incident Inquiry Letter ("the letter") dated April 24, 2013 (received April 29, 2013) regarding a tank overflow event that occurred at CITGO Petroleum Corporation Lemont Refinery in Lemont, Will County, Illinois.

This event was associated with the overfilling of a naphtha feedstock tank for the Refinery's Aromatic Extraction Unit that resulted in an overflow. This material falls under the "CERCLA Petroleum Exclusion Section 101(14)".

This letter presents the items identified in the letter followed by the Lemont Refinery response in *italics*.

"a description of what happened and how it happened"

Mr. Yeric Yarrington, Office of Emergency Response Page 2 May 21, 2013

Response:

The naphtha feedstock Tank 22TKA-1 (tank) at the refinery's Aromatic Extraction Unit, UDEX (Unit 122) overflowed. On March 16, 2013, alarms activated due to a pump shutdown. The alarms activated at the proper settings, however the pump shutdown was not immediately corrected due to human error. The pump shutdown caused the naphtha to back up in the tank, which eventually overflowed into the tank dike area containment and to the process sewer. An estimated 92 barrels of naphtha was released into the tank dike. The majority of the naphtha drained into the refinery's process sewer system as designed. A Tank Location Map and Naphtha Feedstock Tank Map are provided as Figures 1 and 2.

Following is a summary of the release based on the internal formal investigation. On March 16, 2013 at 12:12 AM an extractor charge pump tripped on a motor overload. This resulted in an 80% loss of flow from the naphtha tank. At 12:16 AM an alarm indicated that the tank was 75% full, and at 12:24 AM an alarm indicated the tank was 100% full. These alarms where not acknowledged due to human error. At 12:59 AM operators realized that they had lost flow from the tank. Operators were dispatched to the tank location to restart the pump. At that time, the operators did not notice any petroleum odors or that the tank had overflowed. At 5:00 AM the tank was checked to verify it had not overflowed, however an odor was detected south of the tank. At daybreak oil was noted in the tank dike and it was determined the tank had overflowed into the tank dike area. Photographs were taken of the tank dike area prior to remediation activities and are presented in Attachment A.

"any mitigation actions taken at the time of the incident"

Response:

Most of the free liquid drained into the tank dike process sewer system as designed. The weather prior to this incident was "wintery" and the majority of the ground surface at the time of the incident was frozen. Some liquid, a mixture of the feedstock and water, was observed pooled in the tank dike area as a light rain had fallen recently. A vacuum truck was dispatched on March 16, 2013 to clean up visible liquid on the ground surface and to vacuum residual liquid from the process sewer drain within the tank dike area. To expedite the recovery of free liquids shallow channels were made within the tank dike area to allow standing liquids to flow to a common area for collection. The area was then thoroughly flushed with water from the refinery's firewater system. Several vacuum truckloads of liquid material were removed from the tank dike area, and disposed into the refinery's slop oil system.

The typical tank dike area is constructed of clay with surficial gravel. The tank dike areas are designed to hold the appropriate tank volume in case of a spill, leak or release. While some pooling is possible, the floor of the tank dike area is generally graded towards the process sewer drain. The process sewer drain leads to the refinery process water treatment system.

On March 18, 2013, two days after the incident, between three (3) and six (6) inches of soil was removed from the ground surface across the tank dike area. In one area, as much as one (1) foot of soil was removed in order to find the clay base of the tank dike. The area was then backfilled with clay and top-dressed with gravel. Photographs were taken of the tank dike area after the excavation and backfilling activities were completed. These photographs are presented in Attachment B.

Mr. Yeric Yarrington, Office of Emergency Response Page 3 May 21, 2013

In total, nine (9) roll-off boxes of soil were excavated from the tank dike area. The soil was disposed at the Prairie View Recycling and Disposal Facility located in Wilmington, Illinois. Soil disposal documentation is provided in Attachment C.

Air monitoring of the excavation activities was conducted by the refinery's Safety Personnel. Safety personnel monitored the air for VOCs and benzene using a 6-gas meter and benzene detector, respectively. Benzene concentrations above 5 part per million (ppm) require that the cleanup crews wear fresh air equipment. Throughout the excavation activities the benzene concentrations were less than 5 ppm and were consistently less than 1 ppm. These screening readings were taken at the soil/air interface allowing for conservative personnel health and safety monitoring and were used as a guide for residual contamination removal. Screening readings of less than 1 ppm benzene were observed during excavation, which further supports the premise that the majority of released material flowed into the process sewer system and/or was removed during the vacuum truck activities. The combination of the frozen ground with some water puddles from a recent light rain likely resulted in the naphtha floating on top of the water and not soaking into the ground surface.

 a description of any additional cleanup and preventative action planned."

Response:

No further cleanup activities are planned at this time. The spill was the result of human error. As a result of the incident investigation findings the employee responsible for monitoring the alarm system the night of the incident has been terminated. No equipment, maintenance, process or system changes are planned. The refinery plans to conduct employee refresher training, and review alarm management guidelines and procedures with personnel.

• "if cleanup and disposal have not been completed when you submit your response to this Incident Inquiry Letter, include in your response an estimated time schedule for completing such actions. Upon completion, please submit a final report explaining cleanup actions and disposal."

Response:

The cleanup activities conducted at the naphtha tank dike area after the incident were an appropriate and adequate response to the spill incident. No additional remediation activities are planned.

"the specific information requested in the enclosed attachments"

Response:

<u>Summary</u>

The incident (number H2013-0256) occurred in the early morning hours of March 16, 2013 at the naphtha feedstock tank for the Refinery's Aromatic Extraction Unit, UDEX, at Lemont Refinery. This tank contains naphtha, which overflowed into the tank dike containment and into the process sewer system. Remaining visible liquid was vacuumed from the tank dike

area and several inches of surficial soil were removed from the tank dike area. The incident investigation revealed the cause of the incident was human error. The excavated soil was evaluated under Illinois Administrative Code (IAC) 35 Part 742 Tiered Approach to Corrective Action Objectives (TACO).

Field Activities

The residual liquid in the tank dike area and the process sewer drain was collected March 16, 2013 by vacuum truck and disposed at the refinery's slop oil system.

Two days after the incident, on March 18, 2013, between 0.3 feet to 1.0 foot of surficial soil was removed from the tank dike area. Clean clay was brought in and the area was backfilled. Nine (9) roll-off boxes of soil waste were generated. Three (3) samples were collected from each of the waste roll-off boxes for waste characterization.

Confirmation Sampling

Twenty-seven (27) waste characterization samples were collected from the excavated soil. The waste soil samples were analyzed by Stat Analysis Corporation (Stat) for the volatile organic compounds (VOCs): benzene, toluene, ethylbenzene, and xylenes (BTEX) by Method 8260B; and Resource Conservation and Recovery Act (RCRA) 8 metals: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver by Methods 6020B or 7471A. Several samples were also prepared for the Toxicity Characteristic Leaching Procedure (TCLP) by Method 1311 for further metal analysis. Analytical results of the waste samples were compared to TACO Tier 1 residential (R) and industrial/commercial (IC) remediation objectives (ROs) and are provided in Table 1. The analytical laboratory report is provided in Attachment D. No confirmation additional soil samples have been collected in the tank dike area after the remediation activities because the waste samples met remediation objectives.

While statistical and TACO evaluations on waste samples collected from an excavated area is atypical, the surficial soil excavated to address this incident, likely represented the most impacted soil. The evaluation is provided here to demonstrate that the waste soil samples meet remediation objectives.

The waste samples were compared to the Tier I remediation objectives (ROs) for the following pathways: soil component of groundwater ingestion for Class I groundwater (SC-CLI), the pH specific SC-CLI (pH-SC-CLI), and the inhalation (IH) and Ingestion (IG) pathways for the residential (R), industrial/commercial worker (IC), and construction worker (CW) populations. The waste samples were evaluated collectively. The table below presents the number of Tier I RO exceedances (out of 27) and the maximum concentration for each constituent of concern (COC).

Tier 1 Evaluation

	Numb	ver of sample	
Constituent of	Tier I	RO Exceedances	
Concern	(high	est concentration)	Pathway Exceedances
Benzene	15	(0.51 mg/kg)	$SC ext{-}CLI$
Toluene	1	(14 mg/kg)	SC-CL1
Xylenes	6	(19 mg/kg)	CW-IH
Total Chromium	1	(120 mg/kg)	pH-SC-CL1

Total Lead	10	(280 mg/kg)	pH-SC-CL1
TCLP Lead	11	(0.37 mg/l)	SC-CL1
Total Mercury	22	(3.7 mg/kg)	CW-IH

Additional Conditions

The naphtha does not contain metals; however, refinery wastes are typically sampled for metals for disposal purposes. The chromium and lead concentrations in the waste samples are typical of background concentrations found in surface soils at the refinery.

Chromium

The one waste sample with a chromium concentration of 120 mg/kg was also analyzed for TCLP Chromium. The result was not detected at a reporting limit of <0.01mg/l, which is below the SC-CL1 RO. Therefore no further evaluation is necessary.

Lead

The highest lead concentration from the waste samples was 280 mg/kg, and the TCLP Lead results were above the SC-CL1 RO of 0.0075 mg/l, however the average of the 27 samples was 102 mg/kg (using the laboratory detection limit where lead was not detected). The average of these samples is below the pH-SC-CL1 RO for most pH ranges of 107 mg/kg. The average pH of over 450 refinery soil samples collected under the RFI is 7.85. The lead pH-SC-CL1 RO using 7.85 as an average pH, is 107 mg/kg. As the average soil lead concentration meets the Tier 1 RO, no further evaluation is necessary for lead.

Tier 2 Evaluations

The TACO Equations S28 and S5 were used to calculate site specific Tier 2 ROs for benzene and toluene (for the SC-CL1 pathway), and xylenes and mercury (for the CW-IH pathway), respectively. The assumptions below were used in the Tier 2 RO calculation worksheets along with TACO default values provided in Tables 2 through 7.

- Due to the frozen ground and clay soil, the surface spill apparently impacted only the top 1 foot of soil (based on the maximum depth of soil removed and observations of benzene concentrations in air from the air monitoring during excavation activities.) The depth of source (ds) used in the calculations (1 foot or 0.3048 m) was based on this observation.
- The soil type observed during excavation was clay (based on tank dike construction). The dry soil bulk density (ρb) in the calculations was based on the TACO default values for clay.
- The source length parallel to groundwater flow was assumed to be 150 feet (42.7 meters) which is the approximate length of maximum exposed soil in the tank dike area in the southeast to northwest direction (direction parallel to groundwater flow estimated for this location from the potentiometric contour lines of Plate 3 in the Quarterly Groundwater Monitoring Report First Quarter 2013 (Trihydro, April 11, 2013).
- The hydraulic conductivity (K) of 10^{-4} cm/s (estimated from Bear, 1972 which describes K by soil type). The K for a soil type of "layered clay" ranged from 10^{-4} cm/s to 10^{-5} cm/s and the more conservative value 10^{-4} cm/s was used. (Table 4).

- Aquifer thickness of 10 feet was used. This is a typical thickness used for light non-aqueous phase liquids (LNAPL).
- Hydraulic gradient of 0.0125 was calculated for this location from the potentiometric contour lines of Plate 3 in the Quarterly Groundwater Monitoring Report First Quarter 2013 (Trihydro, April 11, 2013).
- Assumed an average site pH of 7.85 (refinery average of over 450 RCRA Facility Investigation (RFI) samples).

Based on the assumptions listed the Calculated Tier 2 ROs were:

COC	Maximum Concentration	Tier 1 RO	Tier 2 RO
Benzene	0.51	0.03(SC-CL1)	2.4
Toluene	14	12 (SC-CL1)	486
Xylenes	19	5.6 (CW-IH)	320*
Mercury	3.7	0.1(CW-IH)	6.57

Concentrations in mg/kg

Conclusion

After discovery of the release, Lemont Refinery removed free liquids from the tank dike area and then excavated the surface soil from the area which may have been in contact with spilled naphtha. The 27 waste soil samples from the containerized soil were analyzed for BTEX and metals for disposal. The soil sample analytical results were also evaluated using TACO. Each of the waste soil sample analytical results was below the Tier 1 ROs or calculated Tier 2 ROs. The impacted soil is below the Tier 1 and Tier 2 ROs and no further remediation is necessary associated with this release.

If there are questions on this information, please contact Kevin Moss at 630-257-4452 or me at (630) 257-4085.

Sincerely,

Yvonne Jeankeret,

Environmental Manager

KJM/PLM

Enclosures: Figures, Tables, Attachments - See Below)

canner

Cc: Will County EMA

Jim Clark, IEPA, Emergency Operations Unit (Springfield)

Y. Yarrington, Office of Emergency Response (Springfield)

IEPA – Des Plaines Office (Emergency Operations Unit)

IEPA - Compliance & Systems Management, Springfield Office

-Jim Entzminger, USEPA, Chicago Office

John Waligore, IEPA, Division of Legal Counsel

^{*}Calculated value exceeded the soil saturation limit (Csat), therefore the Csat was used.

Enclosures:

Figures: Tank Location Map Figure 1 Naphtha Feedstock Tank Map Figure 2 Tables: Naphtha Feedstock Tank Analytical Results Table 1 Soil Component of Groundwater Ingestion RO Benzene Table 2 Soil Component of Groundwater Ingestion RO Toluene Table 3 Hydraulic Conductivity Values Table 4 Parameters Used in the Solution of Equations S4, S5, S26, and S27 Table 5 SSL Inhalation Tier 2 Soil ROs Xylenes Table 6 SSL Inhalation Tier 2 Soil ROs Mercury Table 7

Attachment A Pre-remediation Photographs
Attachment B Post-remediation Photographs
Attachment C Soil Disposal Documentation

Attachment **D** Stat Laboratory Analytical Report No. 13030746



135th Street & New Avenue Lemont, IL 60439-3659

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June 18, 2013

Ms. Kathy Allen
Illinois Emergency Management Agency (IEMA)
State Emergency Response Commission
1035 Outer Park Drive
Springfield, IL 62704

IEMA Incident No.: H2013-0665 NRC Incident No.: 1050229

Will Co. EMA Report No.: 130612-910-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on June 12, 2013 to Illinois Emergency Management Agency (IEMA – Report No. 2013-0665), National Response Center (NRC – Report No. 1050229) and Will County Emergency Management Agency (Will Co. EMA Report No. 130612-910-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On June 12, 2013, intermittent flaring occurred when a number of process units shutdown due to an electrical power blip and voltage reduction during a severe storm. The cause of the power blip is under investigation.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Emission calculations indicate the emissions were below the reportable quantity for sulfur dioxide.

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 June 18, 2013

If there are questions or if additional information is required, please contact Matt Cordina at (630) 257-4194 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM

cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA – Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines



135th Street & New Avenue Lemont, IL 60439-3659

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July 1, 2013

Ms. Kathy Allen
Illinois Emergency Management Agency (IEMA)
State Emergency Response Commission
1035 Outer Park Drive
Springfield, IL 62704

IEMA Incident No.: H2013-0726

NRC Incident No.: 1051689

Will Co. EMA Report No.: 130625-904-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on June 25, 2013 to Illinois Emergency Management Agency (IEMA — Report No. 2013-0726), National Response Center (NRC — Report No. 1051689) and Will County Emergency Management Agency (Will Co. EMA Report No. 130625-904-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On June 25, 2013, heavy rains caused water intrusion at the Refinery's U119 substation which resulted in a loss of power that caused various unit upsets. At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Emission calculations are on-going and will be provided in follow-up correspondence.

Ms. Kathy Allen Page 2 July 1, 2013

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or if additional information is required, please contact Matt Cordina at (630) 257-4194 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret

Environmental Manager

/PLM

cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA – Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines



135th Street & New Avenue Lemont, IL 60439-3659

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July 3, 2013

Ms. Kathy Allen
Illinois Emergency Management Agency (IEMA)
State Emergency Response Commission
1035 Outer Park Drive
Springfield, IL 62704

Follow-up Information

IEMA Incident No.: H2013-0745

NRC Incident No.: 1052071

Will Co. EMA Report No.: 130628-904-01

Lemont Refinery

CAAPP Permit No. 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This is follow-up to the telephone notification made on June 28, 2013 to Illinois Emergency Management Agency (IEMA – Report No. H2013-0745), National Response Center (NRC – Report No. 1052071) and Will County Emergency Management Agency (Will County EMA Report no. 1300628-904-01) regarding a potential excess emissions event. This follow-up letter also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On June 28, 2013 at approximately 11:35 a.m., Unit 119 Sulfur Recovery Unit B-train tripped offline, due to a malfunctioning knock-out drum level indicator. Load shedding procedures were immediately implemented and load was also shifted to other on-line sulfur recovery trains. No flaring occurred during this event.

Mis. Kathy Allen Page 2 July 3, 2013

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7746-09-5) was unknown, so a precautionary notification was made. Subsequent calculations showed the excess emissions at B-Train were well below the RQ for SO_2 .

There were no off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or if additional information is required, please contact Matt Cordina at (630) 257-4194 or me at 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/plm

Cc: Will County Emergency Management Agency

IEPA – Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines



135th Street & New Avenue Lemont, IL 60439-3659

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Ms. Kathy Allen
Illinois Emergency Management Agency (IEMA)
State Emergency Response Commission
1035 Outer Park Drive
Springfield, IL 62704

Supplemental Follow-up Information IEMA Incident No.: H2013-0726 NRC Incident No.: 1051689

Will Co. EMA Report No.: 130625-904-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on June 25, 2013 and follow-up letter (OE 075-13) dated July 1, to Illinois Emergency Management Agency (IEMA – Report No. H2013-0726, National Response Center (NRC – Report No. 1051689) and Will County Emergency Management Agency (Will Co. EMA Report No. 130625-904-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On June 25, 2013, various units experienced unplanned shutdowns due to a loss of power at the Refinery's Unit 119 sub-station. The power was lost due to arching in a transformer causing the substation to trip off-line. There were no flaring events as part of the transformer failure; however, excess SO_2 emissions resulted from the event.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent calculations showed the emissions of sulfur dioxide (SO₂, CAS Registry No. 7446-09-05) to be 5,053 lb. Of this, 4,868 lb SO₂ were attributed to Fuel Gas H_2S combustion and 185 lb SO_2 were attributed to excess emissions from the U119 A-Train Tail Gas Oxidizer.

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 July 16, 2013

If there are questions or additional information needed at this time, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

CMC/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines



135th Street & New Avenue Lemont, IL 60439-3659

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August 27, 2013

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

Follow-up Information

IEMA Incident No.: H2013-0937 NRC Incident No.: 1057989

Will Co. EMA Report No.: 130823-904-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on August 23, to Illinois Emergency Management Agency (IEMA – Report No. H2013-0937, National Response Center (NRC – Report No. 1057989) and Will County Emergency Management Agency (Will Co. EMA Report No. 130823-904-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On August 23, 2013, at approximately 9:26 a.m., intermittent flaring occurred when the refinery's Diesel Distillate Hydrotreater Unit (Unit 125) was shut down to address a leak on the inlet to the high pressure separator relief valve and unit dump valve. At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Emission calculations are on-going and will be provided in follow-up correspondence.

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 August 27, 2013

If there are questions or additional information needed at this time, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM

Cc: Will County Emergency Management Agency

Rannerel

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines



135th Street & New Avenue Lemont, IL 60439-3659

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September 11, 2013

Ms. Kathy Allen
Illinois Emergency Management Agency (IEMA)
State Emergency Response Commission
1035 Outer Park Drive
Springfield, IL 62704

Supplemental Follow-up Information IEMA Incident No.: H2013-0937 NRC Incident No.: 1057989

Will Co. EMA Report No.: 130823-904-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on August 23, 2013 and follow-up letter (**OE 099-13**) dated August 27, to Illinois Emergency Management Agency (IEMA – Report No. H2013-0937, National Response Center (NRC – Report No. 1057989) and Will County Emergency Management Agency (Will Co. EMA Report No. 130823-904-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On August 23, 2013, intermittent flaring occurred when the refinery's Diesel Distillate Hydrotreater Unit (Unit 125) was shut down. At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent emission estimates showed SO_2 emissions were below the 500 lb Reportable Quantity threshold.

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 September 11, 2013

If there are questions or additional information needed at this time, please contact Matt Klickman at (630) 257-4308 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM

Cc: Will County Emergency Management Agency

IEPA – Des Plaines Office Ray Pilapil, IEPA – Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines

Jim Entzminger, USEPA, Chicago Office

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135th Street & New Avenue Lemont, IL 60439-3659

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October 8, 2013

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

Follow-up Information

IEMA Incident No.: H2013-1070 NRC Incident No.: 10618226 Will County EMA: 31001-902-01

Lemont Refinery

Facility ID No.: 197090AAI

Dear Ms. Allen:

This is follow up to a telephone notification made on October 1, 2013, to Illinois Emergency Management Agency (IEMA – Report No. H2013-1070), National Response Center (NRC – Report No. 10618226) and Will County Emergency Management Agency (31001-902-01), regarding a product leak.

On October 1, 2013, at approximately 2:45 p.m., a contractor installing underground cable for AT&T struck CITGO pipelines, located outside of the refinery property line on the north side of 127th Street. Refinery personnel noticed an oily substance leaking and refinery crews were immediately dispatched to the area to isolate the lines and start a clean-up process.

The leak was contained. This incident is not a result of operations at Lemont Refinery however, precautionary agency notifications were made.

There were no measurable off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or additional information needed, please contact Michael Mee at (630) 257-4474 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM:

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines



135th Street & New Avenue Lemont, IL 60439-3659

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October 14, 2013

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

Follow-up Information

IEMA Incident No.: H2013-1097 NRC Incident No.: 1062322

Will County EMA: 131007-904-01

Lemont Refinery

CAAPP Permit No. 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This is follow-up to the telephone notification made on October 7, 2013 to Illinois Emergency Management Agency (IEMA – Report No. 2013-1097), National Response Center (NRC – Report No. 1062322) and Will County Emergency Management Agency (131007-904-01) regarding a potential excess emissions event. This follow-up letter is also pursuant to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On October 7, 2013 at approximately 2:05 p.m., Unit 121 Sulfur Recovery Unit C-Train tripped offline, due to a malfunctioning level indicator. Load shedding procedures were immediately implemented and load was shifted to other on-line sulfur recovery trains. No flaring occurred during this event.

At the time of the event, the release rate of sulfur dioxide (CAS RN = 7746-09-5) was unknown, and a precautionary notification was made. Subsequent calculations showed the excess emissions at C-Train were below the RQ for SO_2 .

There were no off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 October 14, 2013

If there are questions on this information, please contact Matt Klickman (630) 257-4308 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM:

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines



135th Street & New Avenue Lemont, IL 60439-3659

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7012 0470 0000 1931 4036

October 29, 2013

Ms. Kathy Allen
Illinois Emergency Management Agency (IEMA)
State Emergency Response Commission
1035 Outer Park Drive
Springfield, IL 62704

Follow-up Information

IEMA Incident No.: H2013-1158 NRC Incident No.: 1063867 Will County EMA: 131023-903-01

Lemont Refinery

CAAPP Permit No. 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This is to follow-up a telephone notification made on October 23, 2013 to Illinois Emergency Management Agency (IEMA – Report No. H2013-1158), National Response Center (NRC – Report No. 1063867) and Will County Emergency Management Agency (131023-903-1) regarding a fire at the facility's Crude Unit (Unit 111).

On October 23, 2013 at approximately 7:40 p.m., a leak occurred in the vacuum section of the refinery's Crude unit, resulting in a fire in the operating area of that unit. The fire was brought under control by 11:00p.m. Although the investigation of the root cause has not been completed, it is known that VTB (Vacuum Tower Bottoms) was released and possibly auto-ignited. The fire lead to the shutdown of several process units within the refinery, which resulted in flaring. Emissions of sulfur dioxide (CAS RN = 7446-09-5) due to flaring were estimated to be 6,085 lb. Emissions from the fire have not been calculated yet.

There were no measurable off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 October 29, 2013

Updated information will be provided as available. If there are questions on this information, please contact me at (630) 257-4085.

Sincerely,

Yvonne M/Jeanneret Environmental Manager

/PLM:

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines

Jim Entzminger, USEPA, Chicago Office

John Waligore, IEPA, Division of Legal Council



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November 7, 2013

Ms. Kathy Allen Illinois Emergency Management Agency (IEMA) State Emergency Response Commission 1035 Outer Park Drive Springfield, IL 62704

Follow-up Information IEMA Incident No.: H2013-1201

NRC Incident No.: 1064948
Will County EMA: 131105-902-01

Lemont Refinery

CAAPP Permit No. 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This is to update a telephone notification made to Illinois Emergency Management Agency (IEMA – Report No. H2013-1201), National Response Center (NRC – Report No. 1064948) and Will County Emergency Management Agency (131105-902-01), regarding visual impairment observed near the Lemont Refinery.

On November 5, 2013, the U.S. Coast Guard noticed a visual impairment in the Chicago Sanitary & Ship Canal (canal) near the Lemont Refinery's permitted Outfall (001) and notified Lemont Refinery personnel. Precautionary agency notifications were made and the Outfall was shutdown. Further investigation determined that the visual impairment was coming from the Outfall. The Outfall wasn't completely shut down and dispersant addition rate was high. Containment and sorbent booms were deployed to capture traces of the material. As a precautionary measure a vacuum truck was used to remove residual water from the area of the containment and the Outfall weir box.

Samples were taken from the canal, Outfall weir box and Treated Water Basin (TWB) were analyzed for Oil & Grease and Total Suspended Solids (TSS). The sample results for all are within the allowed Daily Max and 30-day Average discharge limits contained in Lemont Refinery's NPDES Permit. On November 6, 2013, the U.S. Coast Guard was notified of the results.

Ms. Kathy Allen Page 2 November 7, 2013

There were no measurable off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or additional information required, please contact Larry Tyler at (630) 257-4327, Mike Mee at (630) 257-4474 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

J. Clark, IEPA - Emergency Operations Unit, Des Plaines

Jim Entzminger, USEPA, Chicago Office U. S. Coast Guard, Willow Brook, IL



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November 19, 2013

Ms. Kathy Allen
Illinois Emergency Management Agency (IEMA)
State Emergency Response Commission
1035 Outer Park Drive
Springfield, IL 62704

Follow-up Information

IEMA Incident No.: H2013-1215 NRC Incident No.: 1065500

Will Co. EMA Report No.: 13119-903-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on November 12, 2013, to Illinois Emergency Management Agency (IEMA – Report No. H2013-1215, National Response Center (NRC – Report No. 1065500) and Will County Emergency Management Agency Will Co. EMA (13119-903-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On November 12, 2013, intermittent flaring occurred during start-up operations at the Saturated Gas Plant Unit (U217). The other occurrence was flaring and high H₂S in fuel gas during Ultra Low Sulfur Diesel (U590) start-up operations. Subsequent calculations showed the emissions of sulfur dioxide (SO₂, CAS Registry No. 7446-09-05) were less than the "Reportable Quantity" threshold of 500 lbs.

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 November 19, 2013

If there are questions or additional information needed, please contact Matt Klickman at (630) 257-4308, Mike Mee at (630) 257-4474 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM

Cc:

Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines



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November 20, 2013

Ms. Kathy Allen
Illinois Emergency Management Agency (IEMA)
State Emergency Response Commission
1035 Outer Park Drive
Springfield, IL 62704

Supplemental Follow-up Information IEMA Incident No.: H2013-1231 NRC Incident No.: 1065777

Will Co. EMA Report No.: 131114-908-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on November 14, 2013, to Illinois Emergency Management Agency (IEMA – Report No. H2013-1231, National Response Center (NRC – Report No. 1065777) and Will County Emergency Management Agency (Will Co. EMA Report No. 131114-908-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

At approximately 3:10 p.m. on November 14, 2013, the refinery's Sulfur Plant experienced an upset, causing the three trains to shut down. This upset resulted in excess SO_2 from the A and B-trains, fuel gas combustion and flaring. Subsequent calculations showed the emissions of sulfur dioxide (SO_2 , CAS Registry No. 7446-09-05) to be 647 lb. Of this, 336 lb SO_2 were attributed to excess emissions from the trains, 310 lb SO_2 were attributed to fuel gas H_2S combustion, and 1 lb due to flaring.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made.

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 November 20, 2013

If there are questions or additional information required, please contact Matt Klickman at (630) 257-4308, Mike Mee at (630) 257-4447 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines



135th Street & New Avenue Lemont, IL 60439-3659

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7012 0470 0000 1931 4135

December 2, 2013

Ms. Kathy Allen
Illinois Emergency Management Agency (IEMA)
State Emergency Response Commission
1035 Outer Park Drive
Springfield, IL 62704

Supplemental Follow-up Information IEMA Incident No.: H2013-1158 NRC Incident No.: 1063867 Will County EMA: 131023-903-01 Lemont Refinery CAAPP Permit No. 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This is to update the information contained in the follow-up letter (OE 116-13, dated October 29, 2013) to the telephone notification made on October 23, 2013 to Illinois Emergency Management Agency (IEMA – Report No. H2013-1158), National Response Center (NRC – Report No. 1063867) and Will County Emergency Management Agency (131023-903-1) regarding a fire at the facility's Crude Unit (Unit 111).

As indicated in the earlier letter, on October 23, 2013 at approximately 7:40 p.m., a leak occurred in the vacuum section of the refinery's Crude unit, resulting in a fire in the operating area of that unit. The fire was brought under control by 11:00p.m. Vacuum Tower Bottoms (VTB) was released and possibly auto-ignited. The fire led to the shutdown of several process units within the refinery, which resulted in flaring and a brief fuel gas system imbalance. Preliminary investigation findings indicate the systems in place to verify equipment was isolated for maintenance did not provide a true indication.

The emissions reported earlier were preliminary estimates. The event has been evaluated in more detail, with the following relevant results:

	Sulfur dioxide (lb)	Nitrogen dioxide (lb)
Event element	(CAS RN = 7446-09-5)	(CAS RN =1010-24-40)
Fire	8,446	1,685
Flaring	6,050	61
Excess fuel gas H2S	2	
Total	14,498	1,746

There were no measurable off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions on this information, please contact me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

MWK/PLM:

Cc: Will County Emergency Management Agency

IEPA – Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines

Jim Entzminger, USEPA, Chicago Office

John Waligore, IEPA, Division of Legal Counsel

CITGO Lemont Refinery



135th Street and New Avenue Lemont, IL 60439

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December 16, 2013

Ms. Kathy Allen
Illinois Emergency Management Agency (IEMA)
State Emergency Response Commission
1035 Outer Park Drive
Springfield, IL 62704

Follow-up Information

IEMA Incident No.: H2013-1306 NRC Incident No.: 1068085

Will Co. EMA Report No.: 131210-910-01

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

Dear Ms. Allen:

This follows up the telephone notification made on December 10, 2013, to Illinois Emergency Management Agency (IEMA – Report No. H2013-1306, National Response Center (NRC – Report No. 1068085) and Will County Emergency Management Agency (Will Co. EMA Report No. 131210-910-01) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On December 10, 2013, the refinery's Sulfur Recovery Unit experienced an upset that resulted in excess sulfur dioxide (SO₂) emissions when oil carryover upset the unit's amine regenerators which led to the shutdown of the A & B trains.

At the time of the event, the release rate of sulfur dioxide (CAS RN = 7746-09-5) was unknown, and a precautionary notification was made. Subsequent calculations showed the excess emissions were below the RQ for SO₂.

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

Ms. Kathy Allen Page 2 December 16, 2013

If there are questions or additional information required, please contact Matt Klickman at (630) 257-4308, Mike Mee at (630) 257-4447 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Ray Pilapil, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines

OE 003-14 CITGO Lemont Refinery



135th Street and New Avenue Lemont, IL 60439

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January 9, 2014

Illinois Emergency Management Agency (IEMA) Attn: Hazardous Materials Section 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2014-0013 NRC Incident No.: 1070218

Will Co. EMA Report No.: WC-4006

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

To Whom It May Concern:

This follows up the telephone notification made on January 6, 2014 to Illinois Emergency Management Agency (IEMA – Report No. 2014-0013, National Response Center (NRC – Report No. 1070218) and Will County Emergency Management Agency (Will Co. EMA Report No. WC-4006) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On January 6, 2014, there was an extreme cold weather event, which resulted in high SO_2 at the Sulfur Plant and Refinery heaters when the Refinery's CO Boiler tripped due to loss of boiler feed water pumps.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent calculations showed the excess emissions were below the RQ for SO_2 .

IEMA Page 2 January 9, 2014

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or if additional information is required, please contact Matt Klickman at (630) 257-4308, Mike Mee at (630) 257-4474 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM

Cc:

Will County Emergency Management Agency

IEPA - Des Plaines Office

Eric Jones, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines

OE 017-14 CITGO Lemont Refinery



135th Street and New Avenue Lemont, IL 60439

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February 3, 2014

Illinois Emergency Management Agency (IEMA) Attn: Hazardous Materials Section 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2014-0098 NRC Incident No.: 1072306

Will Co. EMA Report No.: WC-4017

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

To Whom It May Concern:

This follows up the telephone notification made on January 28, 2014 to Illinois Emergency Management Agency (IEMA – Report No. 2014-0098, National Response Center (NRC – Report No. 1072306) and Will County Emergency Management Agency (Will Co. EMA Report No. WC-4017) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

This notification was regarding intermittent flaring. On January 28, 2014, due to extreme cold weather and high winds, intentional flaring was initiated at the Refinery's C2 & C3 flares to ensure that there were no freeze up issues and the flares would be available if required for safety purposes.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made.

IEMA Page 2 February 3, 2014

Total SO_2 emissions during the extreme cold event was 3965.4 lb.

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or if additional information is required, please contact Matt Klickman at (630) 257-4308, Mike Mee at (630) 257-4474 or me at (630) 257-4085.

Sincerely,

Yvorine M. Geanneret Environmental Manager

/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Eric Jones, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines

CITGO Lemont Refinery



135th Street and New Avenue Lemont, IL 60439

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February 19, 2014

Illinois Emergency Management Agency (IEMA) Attn: Hazardous Materials Section 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2014-0165

NRC Incident No.: 1073831

Will Co. EMA Report No.: WC-4025

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

To Whom It May Concern:

This follows up the telephone notification made on February 13, 2014 to Illinois Emergency Management Agency (IEMA – Report No. 2014-0165, National Response Center (NRC – Report No. 1073831) and Will County Emergency Management Agency (Will Co. EMA Report No. WC-4025) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On February 13, the Refinery's Fluid Catalytic Cracking Unit (Unit 112) experienced intermittent flaring for approximately 18 minutes when a limit switch failed, resulting in a short upset of the unit.

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent calculations showed the emissions of sulfur dioxide (SO_2 , CAS Registry No. 7446-09-05) were less than the "Reportable Quantity" threshold of SO_2 b.

IEMA Page 2 February 19, 2014

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or if additional information is required, please contact Matt Klickman at (630) 257-4308, Mike Mee at (630) 257-4474 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Eric Jones, IEPA - Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines



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March 19, 2014

Illinois Emergency Management Agency (IEMA) Attn: Hazardous Materials Section 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2014-0304 NRC Incident No.: 1076737

Will Co. EMA Report No.: WC-4051

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

To Whom It May Concern:

This follows up the telephone notification made on March 14, 2014 to Illinois Emergency Management Agency (IEMA – Report No. 2014-0304, National Response Center (NRC – Report No. 1076737) and Will County Emergency Management Agency (Will Co. EMA Report No. WC-4051) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On March 14, at approximately 9:15 p.m., a leak was discovered on the overhead sour water stripper condenser at the Refinery's Sulfur Recovery Plant (U119). The section of the unit where the leak occurred was blocked in and the leak was stopped; repairs underway.

At the time of the event, the emission rate for Hydrogen Sulfide (CAS RN = 7783-06-4) was unknown, so a precautionary notification was made. Subsequent calculations showed the emissions of Hydrogen Sulfide were less than the "Reportable Quantity" threshold of 100 lb.

IEMA Page 2 March 19, 2014

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or if additional information is required, please contact Matt Klickman at (630) 257-4308, Mike Mee at (630) 257-4474 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

earner

Eric Jones, IEPA – Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines

CITGO Lemont Refinery



135th Street and New Avenue Lemont, IL 60439

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February 12, 2014

Illinois Emergency Management Agency (IEMA) Attn: Hazardous Materials Section 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2014-0146 NRC Incident No.: 1073254

Will Co. EMA Report No.: WC-4021

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

To Whom It May Concern:

This follows up the telephone notification made on February 7, 2014 to Illinois Emergency Management Agency (IEMA – Report No. 2014-0146, National Response Center (NRC – Report No. 1073254) and Will County Emergency Management Agency (Will Co. EMA Report No. WC-4021) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On February 7, 2014, a safety valve relieved to the flare system during an upset at the Refinery's Saturated Gas Plant (Unit 217) Debutanizer tower

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent calculations showed the emissions of sulfur dioxide (SO₂, CAS Registry No. 7446-09-05) were less than the "Reportable Quantity" threshold of 500 lb.

IEMA Page 2 February 12, 2014

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or if additional information is required, please contact Matt Klickman at (630) 257-4308, Mike Mee at (630) 257-4474 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Eric Jones, IEPA – Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines

OE 022-14 CITGO Lemont Refinery



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February 12, 2014

Illinois Emergency Management Agency (IEMA) Attn: Hazardous Materials Section 1035 Outer Park Drive Springfield, IL 62704

IEMA Incident No.: H2014-0150 NRC Incident No.: 1073410

Will Co. EMA Report No.: WC-4023

Lemont Refinery

CAAPP Permit No.: 96030079 Facility ID No.: 197090AAI

To Whom It May Concern:

This follows up the telephone notification made on February 9, 2014 to Illinois Emergency Management Agency (IEMA – Report No. 2014-0150, National Response Center (NRC – Report No. 1073410) and Will County Emergency Management Agency (Will Co. EMA Report No. WC-4023) regarding a potential excess emissions event. This also applies to Condition 7.7.10.b.i. of the above-referenced Clean Air Act Permit Program (CAAPP) Permit.

On February 9, 2014, the Refinery's Unsaturated Gas Plant (Unit 212) experienced flaring at the C2/C3 flares when gas pressure became inconsistent while by-passing a trim-cooler (exchanger).

At the time of the event, the emission rate for sulfur dioxide (CAS RN = 7446-09-5) was unknown, so a precautionary notification was made. Subsequent calculations showed the emissions of sulfur dioxide (SO₂, CAS Registry No. 7446-09-05) were less than the "Reportable Quantity" threshold of 500 lb.

IEMA Page 2 February 12, 2014

There were no known off-site impacts as a result of this incident. There were no known or anticipated acute or chronic health risks associated with the release.

If there are questions or if additional information is required, please contact Matt Klickman at (630) 257-4308, Mike Mee at (630) 257-4474 or me at (630) 257-4085.

Sincerely,

Yvonne M. Jeanneret Environmental Manager

/PLM

Cc: Will County Emergency Management Agency

IEPA - Des Plaines Office

Eric Jones, IEPA – Compliance & Systems Management, Springfield

Jim Clark, IEPA - Emergency Operations Unit, Des Plaines